WHAT IS CLAIMED IS:

 A method for enhancing detection of particles of interest in a portal detection system, said method comprising the steps of:

providing a portal having a plurality of sidewalls and a passage between the sidewalls, a ceiling connecting the sidewalls and disposed above the passage and a particle detection apparatus having an inlet in the ceiling and communicating with the passage for receiving air flowing adjacent to a human suspect in the passage; and

directing a plurality of short puffs of air into the passage with sufficient velocity for dislodging particles of interest trapped in clothing of the human suspect in the passage.

- 2. The method of claim 1, wherein the step of directing the short puffs of air into the passage comprises sequentially directing short puffs of air from a lower level in the passage to an upper level.
- 3. The method of claim 1, wherein the step of directing short puffs of air into the passage comprises directing short puffs of air into the passage from a plurality of different directions.
- 4. The method of claim 3, wherein the step of directing the short puffs of air into the passage comprises directing each puff angularly upwardly into the passage.
- 5. The method of claim 4, wherein the step of directing short puffs of air into the passage comprises directing each sequential puff for a time of about 50 ms.
- 6. The method of claim 1, comprising pausing about 100 ms between each sequential puff.